

Heat-resistant cadmium solder

S/860/61/000/000/014/020
A006/A101

high-speed heating JK-2 (LK-2) flux should be used. The new material is suitable for soldering copper parts of electric machines, copper alloys and copper-plated steel, operating at up to 380°C in a corrosion medium of 98% moisture.

Card 2/2

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S/860/61/000/000/012/020
A006/A101

12300

AUTHORS: Lashko, S. V., Katsman, B. O., Lashko, N. F., Soshnikova, K. I.

TITLE: Heat-resistant cadmium solder

SOURCE: Sbornik izobreteniy; svarochnaya tekhnika. Kom. po delam izobr. i otkrytiy. Moscow, Tsentr. byuro tekhn. inform. 1961, 132 (Authors' Certificate no. 117809, cl. 49h, 2602, no. 592122 of February 11, 1958)

TEXT: The proposed heat-resistant cadmium-base solder contains up to 9% silver, up to 7% zinc and up to 2.5% nickel. This solder assures the operation of copper and copper-plated steel soldered joints at up to 300°C. The solder can be produced in the form of foil, wire, rods, plates and ingots of required dimensions. The melting point is 410°C, ultimate strength during tension in cast state is 15 kg/mm². The material is intended for soldering copper parts of electric machines, copper alloys, and copper-plated steel, operating at 300°C, and for the soldering in a bath of copper and copper-plated steel radiators operating at the same temperatures. In resistance or induction heating JK-2

Card 1/2

SOSHNIKOVA, L. A.

SOSHNIKOVA, L. A. -- Author's abstract of a dissertation on "Investigation of a Phenosulfonic Electrolyte for the Electrolytic Refining of Lead" presented toward the academic degree of Candidate in Technical Sciences. Min Higher Education USSR. Moscow Institute of Nonferrous Metals and Gold imeni M.I. Kalinin. Moscow, 1955 (Dissertation for the Degree of Candidate in Technical Sciences.)

So; Knizhnaya Letopis' No 3, 1956

SOSHNIKOVA, L. A.

Production and application of selenium and tellurium
A. A. Solovushkov, L. A. Soshnikova, and M. R. Bernt-
skaya. Khim. Nauka i Prom. 1, 673-7 (1956) -Review,
with 18 references, of the methods of isolation and refining
and some applications of Se and Te. C. M. Karolapoff

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137-58-6-11856

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 97 (USSR)

AUTHORS: Gulyayeva, Ye.I., Soshnikova, L.A.

TITLE: A Conference on Selenium and Tellurium (October 15-16, 1957)
[Soveshchaniye po selenu i telluru. (15-16 oktyabrya 1957 g.)]

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 23, pp 31-32

ABSTRACT: Representatives of 24 organizations participated in the work of the conference. 17 papers and communications were heard and discussed. The major task of the conference was coordination of the work of recovering Se and Te from the products of various fields of production.

G.S.

1. Selenium--Processing 2. Tellurium--Processing

Card 1/1

68240

S/136/60/000/03/010/020

E071/E435

18.3100

AUTHORS: Soshnikova, L.A. and Yezernitskaya, M.Ye.

TITLE: Extraction of Selenium and Tellurium from Slurries of Sulphuric Acid and Cellulose-Paper Plants by Roasting with Calcined Soda

PERIODICAL: Tsvetnyye metally, 1960, Nr 3, pp 55-59 (USSR)

ABSTRACT: Laboratory and pilot plant experiments on extraction of selenium and tellurium from slurries, by-products from sulphuric acid and cellulose-paper plants are described. Analyses of the slurries investigated are given in Table 1. At present selenium is extracted from the above slurries by an oxidizing roasting, during which it is volatilized in the form of selenium dioxide and recovered in wet scrubbers. However, by this method tellurium cannot be recovered. A method of recovery of both these elements by roasting with calcined soda at 300 to 350°C during which their soluble sodium salts are formed, was developed by Gintsvetmet (under the leadership of A.A.Solovushkov). At higher roasting temperatures sodium tellurite is oxidized to tellurate which is insoluble in water and, therefore, the correct

Card 1/4

68240

S/136/60/000/03/010/020
E071/E435

Extraction of Selenium and Tellurium from Slurries of Sulphuric Acid and Cellulose-Paper Plants by Roasting with Calcined Soda

control of the roasting temperature is important. After roasting, selenium and tellurium salts are extracted with water. The solution is neutralized to pH = 5.0 to 5.4 whereupon tellurium precipitates in the form of dioxide. After the removal of tellurium, selenium is precipitated with sulphurous gas after acidifying with hydrochloric acid. The results of laboratory experiments are given in Table 2; 90 to 98% recovery of selenium and 35 to 88% tellurium were obtained. Tellurium dioxide can be dissolved either in acid or in alkali. In the first case it is precipitated with sulphur dioxide, in the second case electrolytic precipitation is applied. The proposed technological scheme is shown in Fig 1. It was tested on a pilot plant scale on the Shchelkov Chemical Works. Initially slurries containing a large proportion of arsenic (20 to 30%) were partially freed from it by extraction with a 25% soda solution. Subsequently, it was found that this pretreatment can be avoided provided slurries

Card 2/4

68240
S/136/60/000/03/010/020
E071/E435

Extraction of Selenium and Tellurium from Slurries of Sulphuric Acid and Cellulose-Paper Plants by Roasting with Calcined Soda

are mixed so as to reduce the arsenic content to 10 to 15%. The content of the main components in the slurries treated on the pilot plant is given in Table 3. Fig 2 shows diagrammatically the equipment layout for roasting with calcined soda, which was done in an electric shaft furnace, and for leaching the roasted material and recovery of selenium and tellurium in a plant. The recoveries of selenium and tellurium (70 to 90%) were somewhat lower than in the laboratory experiments. This is attributed to the inefficiency of the roasting and leaching equipment. Altogether 1000 kg of various slurries were treated, producing 100 kg of selenium and 35 kg of tellurium. It was calculated that the cost of production of selenium by this method will be about 15% lower than by the usual method (oxidizing roasting). The residues left after leaching containing lead, antimony and tellurium can be further treated for the recovery of these elements.

Card 3/4

68240

S/136/60/000/03/010/020
E071/E435

Extraction of Selenium and Tellurium from Slurries of Sulphuric Acid and Cellulose-Paper Plants by Roasting with Calcined Soda

There are 2 figures, 3 tables and 7 references,
6 of which are Soviet and 1 Polish.

Card 4/4

S/136/62/000/007/001/001
E195/E383

AUTHORS: Soshnikova, L.A. and Yezernitskaya, M.Ye.

TITLE: Preparation of tellurium by electrolytic reduction
of tellurium dioxide

PERIODICAL: Tsvetnyye metally, no. 7, 1962, 60 - 64

TEXT: In the introductory paragraphs of this review article its authors discuss the advantages of the electrolytic process of extracting Te from TeO_2 and describe briefly the processes patented abroad and those which are at present used on an industrial scale in Canada, Peru and Japan. Passing on to the Soviet developments, they mention the work carried out in 1940 by Gayev and Golikov (Tsvetnyye metally, no. 5, 1940, 6) and then comment on the results obtained by Yesiyuki and Itiro (Rept. Res. Inst. Underground Resources Mining Coll., Akitai Univ., 1957, no. 18, 23-29) who had studied the effect of the concentration of Te and alkali in the electrolyte on its conductivity, the effect of the current density, temperature and Te and alkali content in the electrolyte on the electrolysis potential and the current efficiency, and the effect of the

Card 1/5

S/156/62/000/007/001/001
E193/E383

Preparation of tellurium

electrode materials on the association potential of sodium tellurite. As a result of this work the following optimum conditions have been recommended: the lower limit of Te content of the electrolyte - 30 g/l.; free alkali content - 100 g/l.; current density - 200 A/m²; electrolyte temperature - 40 to 50 °C; electrode material - stainless steel. These conditions, however, differ from those in current use abroad. Thus, it has been found that dense cathode deposits can be obtained only from electrolytes with a high Te content (270 - 300 g/l.); on the other hand, too high a concentration of Te in the electrolyte may bring about oxidation of four-valent Te to its six-valent form. The latter effect can be minimized by providing adequate circulation of the electrolyte, by maintaining its temperature at 40 - 50 °C and by using low current density (< 60 A/m²). The quality of the cathode deposits is not affected by the alkali content. The highest conductivity of the electrolyte is attained at the alkali concentration of 150 - 200 g/l.; since, however, the solubility of sodium tellurate in alkali is limited, the optimum concentration of the latter is 60 - 80 g/l. In view of

Card 2/3

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E193/E383

Preparation of tellurium

these considerations the optimum electrolysis conditions appear to be: Te content in the electrolyte - 100 to 200 g/l.; alkali concentration - 60 to 80 g/l.; temperature of the electrolyte - 40 to 45 °C; current density - 60 A/m²; a rate of circulation of the electrolyte sufficiently high to ensure a complete change of the electrolyte in the tank 2 to 5 times per hour. Under these conditions the electrolyte remains clear for long periods and very dense cathode deposits are obtained. Electrolytic Te is practically free from As, Sb and Sn. Further refining can be done by remelting (best carried out in a covered graphite crucible) in the course of which the Fe, Al, Mg and Si content is considerably reduced; the Cu and Pb content is also decreased, although to a lesser extent.

Card 3/3

SOSHNIKOVA, L.A.

"Chemistry and technology of selenium and tellurium" by A. A.
Kudriavtsev. Reviewed by L.A.Soshnikova. TSvet. met. 35 no.5:
90-91 My '62. (MIRA 16:5)
(Selenium) (Tellurium) (Kudriavtsev, A.A.)

SOSHNIKOVA, L.A.; YEZERNITSKAYA, M.Ye.

Extracting tellurium from copper electrolyte slimes. Sbor.
nauch. trud. Gintsvermeta no.19:358-366 '62. (MIRA 16:7)

(Tellurium)
(Copper industry--By-products)

L 17126-63

EWP(q)/EWT(m)/BDS AFFTC RDW/JD/AB

ACCESSION NR: AP3000905

S/0279/63/000/002/0079/0085

61
59AUTHORS: Nisel'son, L. A.; Pustil'nik, A. I.; Soshnikova, L.A. (Moscow)TITLE: Purifying selenium from tellurium by rectificationSOURCE: A: SSSR. Izv. otd. tekhn. nauk. Metallurgiya i gornoye delo, no. 2, 1963,
79-85

TOPIC TAGS: rectification, purification, Se, Te, density, viscosity, surface tension

ABSTRACT: The authors made their experiment because the common technique of obtaining Se (by distillation) is ineffective in eliminating certain elements that have comparable volatility (especially Te, Sb, and S). Because of complications in construction if rectification were carried on in a vacuum and because such properties as viscosity and surface tension are thus altered deleteriously, it appeared best to rectify Se at ordinary atmospheric pressure. The setup is illustrated in Fig. 1 (see Enclosure 1). The internal diameter of the column is 30-32 mm. The sieve plate has 40 openings 0.8 mm in diameter, formed ultrasonically. The distance between plates is 30-32 mm, and 10 plates are used in the column. To prevent congelation of the Se, the head of the apparatus is equipped with an electrical

Card 1/3

L 17126-63

ACCESSION NR: AP3000905

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heating element. The thermally insulated jacket of the column, with its electrical heater, is made of glass tubing with asbestos insulation, and the jacket has a transparent window for observation. The temperature was measured in tests with an accuracy of 0.5°C by a Chromel-Alumel thermocouple and a semiautomatic R2/1° potentiometer. In testing the equipment, rectification of Se suffered from the difficulty of maintaining normal conditions, resulting from unequal (impulsive) boiling of Se and from the very narrow range of operating flow rates into the column. The degree of purification obtained in the experiments proved to be substantially less than computed values indicated they should be. The authors conclude that this is due partly to the problem of maintaining steady conditions and partly to imperfections in the design of the column head. They are convinced the rectification method has great promise for Se. Orig. art. has: 4 figures and 6 tables.

ASSOCIATION: none

SUBMITTED: 06Aug62

DATE ACQ: 12Jun63

ENCL: 01

SUB CODE: ML

NO REF Sov: 014

OTHER: 008

Card 2/3

SOSHNIKOVA, L.A.; MATVEYeva, Z.I.

Formation of tellurium trioxide during the agglomeration of slimes
with soda. Tsvet. met. 36 no.11:62-64 N '63. (MIRA 17:1)

SOSHNIKOVA, L.A.; MATVEYEVA, Z.I.

Behavior of certain tellurium-oxygen compounds during
heating and sintering with soda. Sbor. nauch. trud.
Gintsvetmeta no.23:328-334 '65.

Chemical aspects of the interaction between gold, silver,
and copper tellurides with soda. Sbor. nauch. trud.
Gintsvetmeta no.23:335-340 '65. (MIRA 18:12)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001652520013-6

SOSHNIKOVA, M. N.

Soshnikova, M. N. and N. I. Khodakin "The Aetiological Agent of a Peculiar Form of Encephalitis," Dok. AN, No. 5, 1945. Mar., Uzbek Inst. Microbiology & Epidemiology, Tashkent, 1945-c49.

KHODAKIN, N.I.

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001652520013-6"

SOSHNIKOVA, M. N.

A Study of Live Vaccine Against Pappataci Fever

States two avirulent forms of the virus of pappataci fever were obtained by alternating passage in rabbits and chicks. The antigenic properties of vaccines were determined by the production of complement-fixing antibodies in vaccinated subjects and the immunogenic properties, by the illness of humans on subcutaneous infection by the active virus and by increase of the virus in rabbits. Gives results of vaccination of humans.
(RZhBiol, No. 7, 1955) Vopr. Krayevoy Patologii AN UzSSR, 3, 1953, 110-120

SO: Sum No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

SOSHNIKOVA, M. N.

A Study of the Virus of Pappataci Fever in Suckling Mice

Success was attained in adapting the virus of pappataci fever to suckling mice in the first intracerebral passage. Describes effect of subcutaneous, intraperitoneal, and intracerebral injections of the active virus. States the virus retained its pathogenicity for man. (RZhBiol, No. 7, 1955) Vopr. Kravcov Patologii AN UzSSR, 3, 1953, 121-125.

SO: Sum. No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

SOSHNIKOVA, M.N.

Antigenic and immunogenic properties of the pappataci fever virus
adopted for mice sucklings. Vop.kraev.pat. no.4:73-78 '54.
(PAPPATACI FEVER--PREVENTIVE INOCULATION) (MIRA 9:12)
(ANTIGENS AND ANTIBODIES)

SOSHNIKOVA, M.N.

Using the fixation reaction in studying pappataci fever. Vop.kraev.
pat. no. 4:79-87 '54. (MLRA 9:12)
(PAPPATACI FEVER) (COMPLEMENT FIXATION)

SOSHNIKOVA M. N.
USSR/Medicine - Pappataci Fever

FD-1634

Card 1/1 : Pub. 148-14/28

Author : Soshnikova, M. N.

Title : A study of the virus of pappataci fever in suckling mice

Periodical : Zhur. mikro. epid. i immun. 7, 53-55, Jul 1954

Abstract : Experiments showed that one-to fifteen-day-old suckling mice were susceptible to pappataci fever viruses isolated from patients in 1950. The virus was adapted to the mice by infecting them intra-cerebrally. The disease produced in the mice follows the usual clinical course of pappataci fever. No references are cited.

Institution : Tashkent Scientific-Research Institute of Vaccines and Serums (Dir.- A. B. Inogamov; Scientific Director -Prof. N. I. Khodukin)

Submitted : February 2, 1953

S. H. U. Kova, M. A.

907/16-59-9-47/47

Gianelli, G., Ya.K.
The Ukrainian Republican Scientific and Practical Conference on
The Bioterror, Laboratory Diagnosis, Epidemiology and Propylaxis
of Epidemic Hepatitis (Bokov's Disease)
of a virologist, epidemiologist i immunobiologist, 1959.

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Mr. 9, pp. 155-157 (USSR)

The Republican Conference on Epidemic Hepatitis was held in Odessa from 2 - 10 October 1956 and was attended by 160 persons, mainly practical epidemiologists from sanitary-epidemiological stations, representatives of all the Ukrainian institutes of medical science and microbiology and some of the medical institutes of epidemicology and preventive medicine. Delegates attended from the Institute of Virology and Infectious Diseases of the AMN, USSR, the Leningrad Institute of Experimental and Medical Hygiene (Institute of Experimental Medicine, Leningrad), the Leningradsky Sanitary-Epidemiological Medico-Scientific Institute (Santary-Epidemiological Institute, Leningrad), and also the Stavropol, Nizhne Tagansk, Tbilisi, Gor'kiy, Chita, Ashkhabad and Baku as well as Institutes of Vaccines and Toxins.

Epidemiology and Microbiology and Institutes of Vaccines and Serums. The Conference heard 2 papers, divided among 5 sections. Papers were presented on the purification of the causative agent of endemic hepatitis in developing chick embryos [I. V. Kriyava, D. S. Ushatko], in human foetal embryonic tissue [A. M. Sosulin, I. A. Karaseva], and in explanted human embryonic tissue [A. M. Sosulin, I. A. Karaseva, F. A. Gerasimov].

Microbiology and Bacteriology. A short report on the results of bacteriological investigation with nonpathogenic bacteria from

The complement fixation of Botkin's disease. Verifying antibody and G- specific diagnosis were made by N.M. Proskuryakova and G. S. Tsvetkov. The reactions were made at the Institute of Infectious Diseases of the USSR Academy of Medical Sciences. The results of the reaction were positive. The diagnosis of Botkin's disease was confirmed.

Chernitski spoke on the question of Lenitsyn's disease, the proconvulsive. Professor T. A. Stepanin (Lenitsyn) signed the proconvulsive. Professor T. A. Gol'tsev (Tropotrovsk) spoke on the features of Botkin disease. V.P. D.L. Tabakov was (Kosovo) and T.M. Gol'tsev (Tropotrovsk) analyzed the differential features of Botkin disease. L.S. Sichikolskaya (Odessa) and D.M. Panitsa (Kiev) spoke on the treatment of patients with Botkin's disease. L.S. Sichikolskaya (Odessa) and A.P. Larchev (Tobol'sk) presented results of infection with Botkin's disease. A.P. Larchev (Tobol'sk) and A.P. Stepanin (Kiev) and A.P. Larchev (Tobol'sk) presented results of a droplet transmission of the disease.

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Card 2/4

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Sogn a i k e d, M. S.

LAVROVICH, Nikolay Stepanovich; BRITAYEV, M.D., redaktor; GERASIMOVSKIY, V.I.,
redaktor; YERSHOV, A.D., redaktor; KONSTANTINOV, M.M.; NIFONTOV, R.V.,
glavnyy redaktor; SAAKYAN, P.S., redaktor; SMIRNOV, V.I., redaktor;
SOLOV'YEV, D.V., redaktor; CHERNOSVITOVA, Yu.L., redaktor; SOSHNIKOVA,
M.S., redaktor vypuska; SERGEYEVA, N.A., redaktor izdatel'stva;
AVERKIYEVA, T.A., tekhnicheskiy redaktor.

[Fluorspar; (fluorite).] Plavikovyj shpat (fliuorit). Moskva, Gos.
nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1956. 133 p.
(Otsenka mestorozhdenii pri poiskakh i razvedkakh, no.16).
(Fluorite) (MLRA 10:9)

BENESLAVSKIY, S.I.; GORETSKIY, Yu.K.[deceased]; ZVEREV, L.V.;
SOSHNIKOVA, M.S., nauchnyy red.; GRISHINA, T.B., red.
izd-va; BYKOVA, V.V., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mine-
ral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos-
geoltekhizdat. No.35. [Aluminum] Aluminii. 1962. 59 p.
(MIRA 15:7)

1. Moscow. Vsesoyuznyy nauchnyy nauchno-issledovatel'skiy
institut mineral'nogo syr'ya.
(Aluminum)

SOSHNIKOVA, M.S.

Prospects for increasing the mineral resources of the Siberian
aluminum industry. Razved.i okh. nedr 29 no.1:9-13 Ja '63.
(MIRA 16:2)

1. Glavnoye upravleniye geologii i okhrany nedr pri Sovete
Ministrov RSFSR.
(Siberia—Bauxite)

KUZNETSOV, V. D., kand. tekhn. nauk; SOSHNIKOVA, N. V., inzh.

Redesigning of the antenna systems of television stations for
transmission of two programs. Vest. sviazi 23 no.4:3-6 Ap '63.
(MIRA 16:4)

(Television—Antennas)
(Television—Transmitters and transmission)

SOSHNIKOVA, T.M.

Biology of *Candida exigua* Grav., parasitic on the alfalfa weevil
Phytonomus variabilis Hbst. Trudy Inst. zool. i paraz. AN Uz. SSR
6:95-111 '56. (Uzbekistan--Parasites--Alfalfa weevil)
(Insects, Injurious and beneficial--Biological control)

M.

USSR/Cultivated Plants - Fodder.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15722
Author : Yu. Usmanov, Z. Soshnina
Inst : Bashkir Agricultural Institute.
Title : The Effect of Fertilizer on the Mangel-Wurzel Yield.
(Vliyaniye udobreniy na urozhay kormovoy svekly).
Orig Pub : S. kh. Bashkirii, 1956, No 9, 20-28.
Abstract : The department of agricultural chemistry of the Bashkir Agricultural Institute conducted tests in 1953 and 1954 to study the effect of mineral fertilizer and manure on the mangel-wurzel yield on the forest steppe of Bashkir. The greatest yield boost at 78.5 centners per hectare was gotten when applying P₂O₅ 200 and K₂O 100 kilograms per hectare, and when 30 tons per ha. of manure was added as well there was 51.6 centners per ha.

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001652520013-6"

SOSIANTS, Vasili Georgievich

Remont putei tramvaya v usloviakh voennogo vremeni. Maintenance and repair of streetcars under wartime conditions. Moskva, Izd-vo Narkomkhoza RSFSR, 1943. 71 p. illus., diagrs., profile.

DLC: TF705.S6

Rukovodstvo dlia tramvainogo strelochnika. Manual for a switchman. Utverzhdeno v kachestve ucheb. posobiia po tekhnicheskym voprosam. Moskva, Izd-vo Narkomkhoza RSFSR, 1946. 56 p. diagrs. MH NNC

DLC: TF873.S65

MILADINOVIC, N.; SOSIC, B.

Yugoslavia (430)

Agriculture -- Plant & Animal Industry

Summer planting of potatoes. p. 123. Arhiv Za Poljoprivredne Nauke, Vol. 5, no. 3, 1952.

East European Acquisitions List, Library of Congress, Vol. 2, No. 4, April 1953. UNCLASSIFIED.

SOSIC, V.

"The solution of the ventilation problem in Trepca." p. 50. (Rudarsko-Metalurski Zbornik.
No. 1, 1952. Ljubljana.)

SO: Monthly List of East European Accessions. Vol. 3, no. 3. Library of Congress. March 1954.
Uncl.

SOSIC, V

Driving a new shaft in the Trepca mine. pl 1410

TEHNIKA, Beograd, Vol 10, No. 10, 1955

SO: EEAL, Vol 5, No. 7, July 1956

SOSIC, V.

Contribution to the discussion on filling up the Trepca Mine with earth
by the blockcutting method. p. 1338.
(Tehnika, Vol. 11, no. 9, 1956. Beograd, Yugoslavia)

SO: Monthly List of East European Accessions. (EEAL) LC, Vol. 6, No. 7,
July 1957. Uncl.

SOSIC, V.

A review of present boring technics for underground communications.

p. 138 (Nova Proizvodnja) Vol. 8, no. 3/4, May 1957, Ljubljana, Yugoslavia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

SOSIEN, B.

The 5-year plan on railroads marked by modernization. Przegl techn
no.51:5,6 21 D '6G.

SOSIKYAN, G.M.

Chlorosis resistance of different grape varieties used as graft
stock in Noyemberyan District [In Armenian with summary in Russian].
Izv.AN Arm.SSR.Biol.i sel'khoz.nauki. 4 no.7:665-673 '51.

(MLRA 9:8)

(Noyemberyan District--Grapes--Disease and pest resistance)

USSR/Cultivated Plants. Fruits. Berries.

M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20511.

Author : R.A. Yeresyan, G.M. Sosikyan.
Inst : Viticultural Institute of the Academy of Sciences ArmSSR.

Title : The Relative Phylloxera Resistance of Several Grape
Varieties in the North Eastern Rayons of Armenia.
(Sravnitel'naya fillokseroustoychivost' nekotorykh sortov
vinograda v severo-vostochnykh rayonakh Armenii).

Orig Pub: Tr. In-t vinogradarstva i vinodeliya AN ArmSSR, 1956,
vyp. 2, 91-103.

Abstract: Research in the testing vineyard at Noyemberyanskiy rayon
has established that the Dzherdzheruk and Sevanush varie-
ties take first place in relative phylloxera resistance
in the north eastern rayons of Armenia. The Aligote

Card : 1/2

USTINOV, V.; BOBROVNIKOV, N.; PETUKHOV, K.; KREST'YANINOV, V.; SOSIN, A.

Moscow workers kept their promise in an honorable manner. Gor.
khoz. Mosk. 34 no.1:1-3 Ja '60. (MIRA 13:5)

1. Sekretar' Moskovskogo gorodskogo komiteta Kommunisticheskoy
partii Sovetskogo Soyuza (for Ustinov). 2. Predsedatel' ispolkoma
Mossaveta (for Bobrovnikov). 3. Predsedatel' Mosgorsovznarkhoza
(for Petukhov). 4. Predsedatel' Moskovskogo gorodskogo soveta
profsoyuzov (for Krest'yaninov). 5. Sekretar' Moskovskogo gorod-
skogo komiteta Vsesoyuznogo Leninskogo kommunisticheskogo soyuza
molodezhi (for Sosin).

(Moscow--Municipal services) (Moscow--Building)

Sosin, A.A.

3-5-3/38

AUTHOR: Sosin, A.A., Head of the Department of Student Youth, Tsk
VLKSM

TITLE: To Render More Active the Participation of Komsomol'tsy in
the Life of a Vuz (Aktivizirovat' uchastiye komsomol'tsev v
zhizni Vuza)

PERIODICAL: Vestnik vysshey shkoly, 1957, Nr 5, pp 9-14 (USSR)

ABSTRACT: The author says that the Komsomol organizations include
many students and as a powerful force should not be over-
looked by the Vuz management. It is useful to let them take
part in the life of the Vuz. Some examples are stated where
Komsomol organizations submitted problems to the Institute
councils.

It is imperative to increase the rights of the Komsomol
organizations in the Vuz as well as their part in the edu-
cation of students. The accomplishment of this task requires
active participation by the Komsomol in all the training and
liaison activities. The students must take part in the in-
vention departments, in qualification projects on industrial
themes in helping with technical problems, in research
and practical application.

Card 1/2

VYGODSKIY, Mark Yakovlevich; RYVKIN, A.Z., redaktor; SOSIN, B.G., redaktor
AKHIEZER, S.N., tekhnicheskiy redaktor

[Manual of higher mathematics] Spravochnik po vysshei matematike.
Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1956. 783 p. (MLRA 9:8)
(Mathematics--Handbooks, manuals, etc.)

BERMANT, Anisim Fedorovich; SOSIN, B.G., red.; YERMAKOVA, Ye.A., tekhn.red.

[Mappings, curvilinear coordinates, transformations, Green's formulas] Otoobrazheniya, krivolinейные координаты, преобразования, формулы Грина. Moskva, Gos.izd-vo fiziko-matematicheskoi lit-ry, 1958. 306 p. (Izbrannye glavy vysshei matematiki dlja inzhenerov i studentov vtuzov). (MIRA 11:12)

1. Moskovskiy inzhenerno-stroitel'nyy institut im.V.V.Kuybysheva
(for Bermant).
(Transformations (Mathematics)) (Calculus) (Potential, Theory of)

VYGODSKIY, Mark Yakovlevich; RYVKIN, A.Z., red.; SOSIN, B.G., red.;
AKHIEZER, S.N., tekhn.red.

[Handbook of higher mathematics] Spravochnik po vysshei
matematike. Izd.4., stereotipnoe. Moskva, Gos.izd-vo
fiziko-matem.lit-ry, 1959. 783 p. (MIRA 12:8)
(Mathematics--Handbooks, manuals, etc.)

SOS IN, G. L., inzh.-kapitan

Meteorological causes of instability in the performance of the
radio direction finder. Vest-Vozd.Fl. no.10:3941 O '60.
(MIRA 13:11)

(Radio direction finders)

SOSIN, G.L. (Tbilisi)

Forecasting of thunderstorms in Ciscaucasia. Meteor.i gidrol.
no.8:29-32 Ag. '63. (MIRA 16:10)

SOSIN, G.L.

Aerosynoptic conditions of the formation of thunderstorms
in Georgia. Trudy TSAO no.59:53-66 '64.

(MIRA 19:1)

SOSIN, I.

Let us take fuller account of hidden potentialities. Fin.
SSSR 20 no.9:19-24 0 '59. (MIRA 12:12)

1. Nachal'nik Byudzhetnogo upravleniya Ministerstva finansov
RSFSR. (Budget)

SOSIN, I.

Planning and the organization of carrying out local budgets under
the new conditions. Fin. SSSR 37 no.6:28-33 Je '63.
(MIRA 16:9)

I. Nachal'nik Byudzhetnogo upravleniya Ministerstva finansov
RSFSR.
(Budget)

SOSIN, I.N. (Dnepropetrovsk)

Diathermo-electrophoresis of medicinal substances through a
bathtub. Vop. kur., fizioter. i lech. fiz. kul't. 26 no. 2:168
Mr-Ap '61. (MIRA 14:4)

(ELECTROPHORESIS)

SOSIN, I.M.

Review of I.I. Skimanko's book "Physiotherapy of surgical diseases and traumatic sequelae." Vop. kur., fizioter. i lech. fiz. kul't. 29 no.2:179-181 Mr-Ap '64 (NTRA 18:2)

B.J.R. SOSIN, J.

*metals - smelting, alloying
and Refining*

5108* Reactions in the Muffle of a Zinc Furnace. (In Polish.) A. Krupkowski and J. Sosin. *Prace Glownego Instytutu Metalurgii*, v. 3, no. 6, 1951, p. 437-461.
During the reduction of Zn, a number of chemical reactions take place in the muffle of a furnace between carbon and the compounds of Zn, Pb, Fe, Cu, Cd, Sn, etc. The composition of gas evolved from the Zn dust is used as basis for calculation of direction and intensity of above reactions at 1200°K. Conclusions are summarized in English. Data are extensively tabulated and charted.

SOSIN, Jan, mgr inz.; ZACZKOWSKI, Stanislaw, mgr inz.

Experiments in sintering copper concentrates. Rudy i metale
6 no.10:445-451 0 '61.

ORMAN, Zofia, doc. dr inz.; KOLARSKI, Zbigniew, inz.; SOSIN,
Kazimierz, mgr

Ashes from Turoszow brown coal as raw material for the
production of alumina. Rudy i metale 9 no. 1: 13-18 Ja '64.

SOSIN, L.A., inzh.

Let's regulate quality control of welded joints. Stroi. truboprov.
6 no.6:23-25 Je '61.
(MIRA 14:7)

1. Trest Orggaz, Moskva.
(Pipe-Welding)

SOSIN, L.A., inzh.

Batteryless charging unit for DK-0, 2 dosimeters. Stroi.truboprov.
7 no.2:28 F '62. (MIRA 15:3)
(Radiation--Dosage)

MAVRISHCHEV, V.S., kand. ekon. nauk; VISYULIN, F.P., kand. ekon. nauk; STROKOVA, V.I., kand. ekon. nauk; VYBORNOK, V.I., kand. ekon. nauk; LOPATIN, N.V., kand. ekon. nauk; SOSIN, L.M., kand. ekon. nauk; ZYATIKOV, Ya.M., kand. ekon. nauk; LYSOV, N.Ye., kand. ekon. nauk; NEVEL'SKAYA, K.I., kand. ekon. nauk; TRUBILKO, N.P., kand. ekon. nauk; OS'KIN, V.Ya., kand. ekon. nauk

[Chemicalization of industrial production in White Russia]
Khimizatsila promyshlennogo proizvodstva Belorussii. Minsk,
Nauka i tekhnika, 1965. 126 p. (MIRA 18:5)

SC:IN, Marian (Krakow, ul. Kopernika 17 I Klinika Chorob Wewnetrznych A. M.)

Importance of auxillary tests in the ambulatory work of the Thyroid Diseases Dispensary. Polski tygod. lek. 13 no.4:130-132 27 Jan 58.

1. Z I kliniki Chorob Wewnetrznych A. M. w Krakowie; kierownik: prof. dr Leon Tochowicz i z Wojewodzkiej Przychodni Schorzen Tarczycy w Krakowie; kierownik, doc. dr Waldyslaw Krol.

(THYROID GLAND, dis.

ther., auxillary tests to determine dis. stage after ther.
(Pol))

KIETA-FYDA, Aleksandra; PASIK, Stanislaw; SOSIN, Marian

A syndrome of gastro-intestino-colic fistula (observation on 2 cases). Polski tygod.lek.15 no.10:365-367 7 Mr '60.

1. Z I Kliniki Chorob Wewnetrznych A.M. w Krakowie; kierownik:
prof.dr, Leon Tochowicz.

(GASTRIC FISTULA etiol.)
(FISTULA INTESTINAL etiol.)
(STOMACH surg.)

KROL, Wladyslaw; KIETA-FYDA, Aleksandra, TABLEAU, Jerzy; SOSIN, Marian;
ZUROWSKI, Czeslaw.

The circulatory system in shock in recent myocardial infarction. Pol. tyg.lek. 18 no.45:1669-1675 4 N'63.

1. Z I Kliniki Chorob Wewnetrznych AM w Krakowie. Kierownik:
prof.dr. Leon Tochowicz.

BURMISTROV, N.A.; KOROBENNIKOVA, A.D.; KHATSKYEVICH, V.S.; SOSIN, M.A.;
OSOKINA, K.I.; BOZHKO, V.S.; MOSKALEV, I.A.; GOGIN, N.M.;
DANILKINA, V.I.; BEZRUCHENKO, I.Ya.

Experience in competing for the right to be called an enterprise
of communist labor. Vest. sviazi 21 no.11:22-25 N '61.

(MIRA 14:11)

1. Nachal'nik Pervomayskoy kontory svyazi g. Moskvy (for Burmistrov).
2. Nachal'nik otdeleniya svyazi Kupino, Shebekinskogo rayona, Belgorodskoy obl. (for Korobeynikova).
3. Nachal'nik Noginskoy rayonnoy kontory svyazi Moskovskoy obl. (for Khatskevich).
4. Nachal'nik Teykovskoy kontory svyazi Ivanovskoy obl. (for Sosin).
5. Nachal'nik 16-go otdeleniya svyazi Dzerzhinska, Gor'kovskoy obl. (for Osokina).
6. Nachal'nik Sovetskoy kontory svyazi Kaliningradskoy oblasti (for Bozhko).
7. Nachal'nik Sovetskoy kontory svyazi Kurskoy obl. (for Moskalev).
8. Nachal'nik Kanavinskoy kontory svyazi g. Gor'kogo (for Gogin).
9. Nachal'nik Shchelkanovskogo otdeleniya svyazi Yukhnovskogo rayona, Kaluzhskoy obl. (for Danilkina).
10. Nachal'nik Bobrovskoy rayonnoy kontory svyazi Voronezhskoy oblasti (for Bezruchenko).

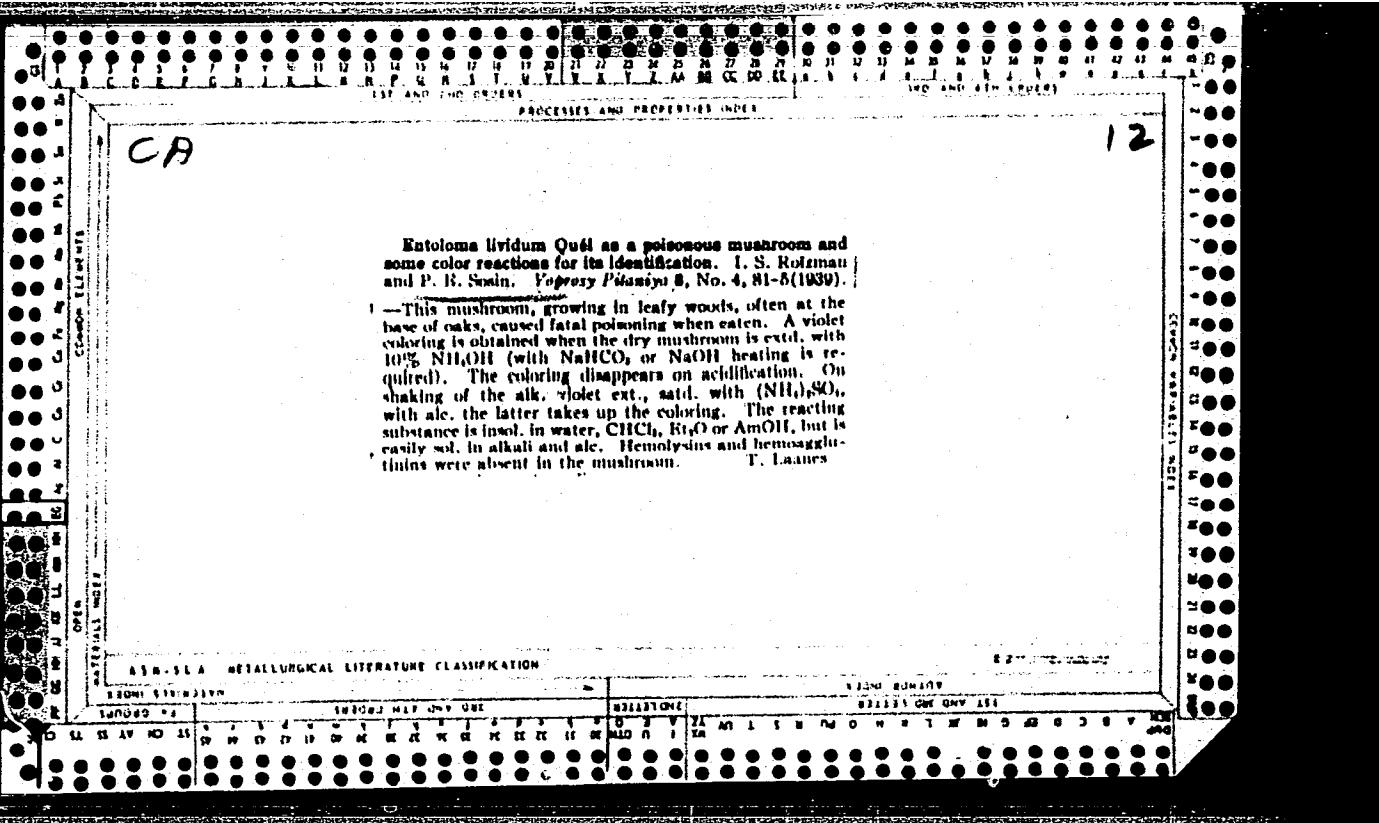
(Telecommunication—Employees)

SOSIN, M.L., inzh.

Results of technical tests of a type spray chamber. Sbox, turd.
NIIST no. 6:146-153 '60. (MIRA 14:4)
(Air conditioning)

KARPIS, Ye. Ye.; SIMONOVICH, B.S.; SOSIN, M.L.

Basic principles of air conditioning for hospital operation rooms.
(MIRA 14:6)
Vod. i san. tekhn. no.5:35-38 My '61.
(Hospitals--Air conditioning)



SOSIN, P.

Sosin, P. "Contributions to the Fungal Flora of the Kam'ianets-Podil'sk Oblast,"
Botanichniy Zhurnal. Akademiiia Nauk UkrSSR, no. 2, 1940, pp. 381-386. 450 J8212J.

So: SIRA - Si-90-53, 15 Dec 1953

1. SODIN, P.Ye.
2. У35к (600)
4. Gasteromycetes
7. New species of gasteromycetes, Bot.mat.Otd.spor.rast. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

. SOSIN, P.Ye.

Work of the Botany Department of the Poltava Pedagogical Institute.
Bot. zhur. [Ukr.] 11 no. 2:103 '54. (MIRA 8:7)
(Poltava--Botany--Study and teaching)

VASIL'YEVA, L.N.; SOSIN, P.Ye.

Gasteromycetes of the Maritime Territory. Soob.DVFAN SSSR no.11:
58-62 '59. (MIRA 13:11)

1. Dal'nevostochnyy filial imeni V.L.Komarova Sibirskego otdeleniya
AN SSSR (for Vasil'yev). 2. Poltavskiy pedagogicheskiy institut
(for Sosin).

(Maritime Territory--Gasteromycetes)

SOSIN, P.Ye.; MELIK-KHACHATRYAN, Dzh.G.

Materials on the flora of gasteromycetes of the Armenian S.S.R.
Izv. AN Arm. SSR. Biol. nauki 12 no.6:73-79 Je '59.
(MIRA 12:10)

1. Kafedra botaniki Yerevanskogo gosudarstvennogo universiteta
i Kafedra botaniki Poltavskogo pedagogicheskogo instituta.
(Armenia--Casteromycetes)

SOSIN, P.Ye.

Morphological characters of Gasteromycetes with respect to their
adaptive significance [with summary in English]. Bot. zhur. 44
no.1:9-18 Ja '59. (MIRA 12:1)

1. Poltavskiy gosudarstvennyy pedagogicheskiy institut.
(Gasteromycetes)

VAKIN, A.T.; VASIL'YEVA, L.N.; GOLOVIN, P.N.; KOMARNITSKIY, N.A.; LITVINOV,
M.A.; SOSIN, P.Ye.; STRAKHOV, T.D.; TETRERMVNIKOVA-BABAYAN, D.N.;
CHEREMISITNOV, N.A.; SHCHERBINA, T.S.

"Bracket fungi of the European part of the U.S.S.R. and the Caucasus"
by A.S. Bondartsev. Reviewed by A.T. Vakin and others. Bot. zhur.
44 no.3:412-414 Mr '59. (MIRA 12:7)
(Wood-decaying fungi) (Bandartsev, A.S.)

VASIL'YEVA, L.N.; SHCHERBINA, T.S.; LITVINOV, M.A.; SOSIN, P.Ye.

"An outline of geographical distribution of mushrooms in the
U.S.S.R." by B.P.Vasil'kov. Reviewed by L.N.Vasil'eva and
others. Bot.zhur. 44 no.9:1359-1363 S '59. (MIRA 13:2)

1. Botanicheskiy institut im. V.L.Komarova AN SSSR, Leningrad.
(Fungi) (Vasil'kov, B.P.)

SOSIN, P.Ye.

New interesting species of Gasteromycetes from the Far
East. Bot. mat. Otd. spor. rast. 13:207-214 '60.
(MIRA13:7)
(Soviet Far East--Gasteromycetes)

SOSIN, P.Ye.

New basidiomycetous fungi from the Ukrainian S.S.R.
Bot. mat. Otd. spor. rast. 13:214-220 '60. (MIRA 13:7)
(Ukraine--Basidiomycets)

SOSIN, Sergey Lyudvigovich; BABUSHKINA, S.I., red. izd-va; ROMANOV,
G.N., tekhn. red.

[Wool and silk from petroleum and gas] Sherst' i shelk iz
nefti i gaza. Moskva, Izd-vo Akad. nauk SSSR, 1962. 109 p.
(MIRA 15:2)

(Textile fibers, Synthetic)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001652520013-6

SOSIN, S. L., ALEKSEYEVA, V. P., KORSHAK, V. V.

"On the preparation of new types of linear polymers by polyrecombination."

report presented at the International Polymer Symposium, (IUPAC), Moscow, USSR,
14-18 June 1960.

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001652520013-6"

SOSIN, S. L.

"Vapor Phase Catalytic Oxidation of Paradialkyl Substituted Aromatic Hydrocarbons."
Sub 17 Oct 51, Moscow Order of Lenin Chemicotechnological Inst imeni D. I. Mendeleyev

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

SOSIN, S. L.

AID P - 271

Subject : USSR/Chemistry

Card : 1/1

Authors : Sosin, S. L. and Sladkov, A. M. (Moscow)

Title : Catalytic oxidation of homologs of benzene

Periodical : Usp. khim. 23, No. 3, 377-396, 1954

Abstract : Review of the oxidation of alkyl homologs of benzene in liquid and gaseous media, with and without catalysts, at atmospheric pressure and under high pressures. One diagram. One table. 94 references (27 Russian): 1908-1952.

Institution : None

Submitted : No date

SOSIN, S., kandidat tekhnicheskikh nauk.

How tetraethyllead was discovered. Znan. sila 31 no.3:12-16
Mr '56. (MIRA 9:7)
(Gasoline--Antiknock and antiknock mixtures)

SOSIN, S. L.
KORSHAK, V.V.; SOSIN, S.L.; CHISTYAKOVA, M.V.

Letters to the editor. Izv. AN SSSR Otd. khim. nauk no.10:1271
O '57. (MIRA 11:3)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Cumene) (Oxides)

SOV/20-121-2-29/53

AUTHORS: Korshak, V. V., Corresponding Member, Academy of Sciences,
USSR, Sosin, S. L., Chistyakova, M. V.

TITLE: The Use of the Polyrecombination Reaction in the Production
of Polymers (Primeneniye reaktsii polirekombinatsii dlya
polucheniya polimerov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 2, pp. 299 -
302 (USSR)

ABSTRACT: Many scientists have observed the effect of free radicals
forming due to the decomposition of peroxides on the formation
of compounds which are dimers of those radicals which are the
residue of the solvent after the subtraction of a hydrogen
atom (Ref 1). The authors could prove that the reaction may,
on certain conditions, take such a course that it does no longer
supply dimers of the solvent but only high-molecular compounds
(Ref 2). This takes place because of a polyrecombination re-
action. The present article describes new experimental results.
The p-di-isopropyl benzene was the initial substance while
various peroxides (mainly tertiary butyl peroxide) served as

Card 1/4

SOV/20-121-2-29/53

The Use of the Polyrecombination Reaction in the Production of Polymers

a source of the free radicals. The mentioned peroxide was added gradually to a layer of hydrocarbon at 170 - 200°. On this occasion a polymer formed which contains, according to the conditions of reaction, a smaller or larger amount of the insoluble three-dimensional part. The soluble part was extracted by benzene and was precipitated with methanol. The polymer is a white powder with a melting point of 210 - 230°. It was proved radiographically that the degree of crystallization of the soluble polymer does not exceed 10% and that for this reason it has to be regarded as practically amorphous. The insoluble polymer decomposes at about 300°; its degree of crystallization reaches 60%. Figure 1 shows that with the increasing amount of peroxide also the molecular weight of the polymer produced increases. At a molar ratio of peroxide and hydrocarbon = 1 the latter is practically converted completely into various reaction products. The amount of high molecular products reaches, however, 100% only at the mentioned ratio = 3. Thus the first mole of the peroxide reacts with the initial hydrocarbon. The 2nd and 3rd moles, however, react already with the products of conversion which represent a mixture of

Card 2/4

SOV/20-121-2-29/53

The Use of the Polyrecombination Reaction in the Production of Polymers

di- and trimers. The first stage is the decomposition of the peroxide with the formation of free radicals. They are tertiary butoxyl-as well as methyl radicals. They are at different ratios depending on the temperature and the properties of the solvent. About half of the peroxide decomposes under the formation of butoxy radicals. The higher the temperature the more marked becomes the decomposition under the formation of methyl radicals. The authors describe further conversions and characterize the reaction discussed as one related to the polycondensation. Table 1 shows the results obtained in using other initial products.

There are 2 figures, 1 table, and 5 references, 1 of which is Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR
(Institute of ~~Elemental~~ Organic Compounds, AS USSR)

SUBMITTED: March 28, 1958

Card 3/4

KORSHAK, V.V.; SOSIN, S.L.; CHISTYAKOVA, M.V.

Obtaining macromolecular compounds by the reaction of polyrecombination. Vysokom. soed. 1 no.7:937-945 J1 '59. (MIRA 12:11)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Macromolecular compounds) (Polymerization)

SOV/1982

International symposium on macromolecular chemistry, Moscow, 1960.

Mosimetrodnyj simpozium po makromolekulyarnoy khimii SSSR, Moskva, 14-18 iunya 1960. K. I. doklad i posterov. Sotsial. i. [International Symposium on Macromolecular Chemistry held in Moscow, June 14-18, 1960]. Papers and Summaries. Section I. [Moscow, Izd-vo AN SSSR] 3ab. P. 5,500 copies printed.

Sponsoring Agency: The International Union of Pure and Applied Chemistry, Commission on Macromolecular Chemistry

Tech. Ed.: T. V. Polykova.

PURPOSE: This collection of articles is intended for chemists and researchers interested in macromolecular chemistry.

COVERAGE: This is Section I of a multi-volume work containing scientific papers on macromolecular chemistry in Moscow. The material includes data on the synthesis and properties of polymers, and on the processes of polymerization, copolymerization, polycondensation, and polyrecrystallization. Each text is presented in full or summarized in French, English, and Russian. There are 47 papers, 26 of which were presented by Soviet, Hungarian, Bulgarian, and Czechoslovakian scientists. No personalities are mentioned. References accompany individual articles.

- | | |
|---|--|
| Miyakawa, Y., I., B. A. Dolgoplozk, T. G. Zhuravleva, P. N. Novovol'skaya, and T. N. Burenichka (USSR). The Synthesis of Clis- and Trans-Diene Polymers on Oxide Catalysts and a Study of Their Structure and Properties 13 | |
| Kozai, T., Ya., G. V. Kostylev, Yu. V. Pletenitsyn (USSR). Synthesis and Polymerization of Saturated Polyacrylates 47 | |
| Zilberman, Ya., M., A. Ye. Bulikova, and A. M. Tenlyukov (USSR). New Method of Preparation of Polyesters and Their Oligomers 58 | |
| Bobdanecky, M., and A. Šternachnus (Czechoslovakia). Analysis of Cross-linked Polyesters 72 | |
| Vashchuk, A. A., Yu. P. Vasil'chenko, M. G. Ershova, L. V. Kukharova, and G. A. Gledzerik (USSR). On the Synthesis and Properties of Cyclic-Linear Polymers of the Type of Poly-p-Allylene and Polyphenyleneether 90 | |
| Makorukh, S. G. (USSR). Cyclic Polymerization and Copolymerization of Divinylbenzene 101 | |
| Pushkin, I. A., A. I. Perel'man, A. V. Topchilov, and B. A. Frenzel (USSR). Synthesis of Crystalline Polyvinylidenechloride 118 | |
| Arbusova, I. A., and Ye. M. Rostovtseva (USSR). Polymerization of Poly-functional Compounds 125 | |
| Soloden, O. P., N. Dzhonidze, E. Shishava, and N. Tschetina (Bulgaria). Polymerization of Vinylcarbazole in the Presence of Butyllithium and Titanium Chloride Type Catalysts 131 | |
| Kornblat, V. V., S. I. Sozin, and V. P. Al'tshul (USSR). On the Preparation of the New Type of Linear Polymers by the Reaction of Poly-Combination 141 | |
| Nesetikh, B. S., A. V. Topchilov, and S. G. Durov'yan (USSR). The Synthesis of Organosilicon Polymers on a Complex Catalyst (G-25/3 LiTICl) 154 | |
| Kolominov, G. S., S. I. Davydova, and N. V. Klimentova (USSR). Germanium-containing Polymers 158 | |
| Shojszakarab, M. P., S. P. Molchan, V. N. Kretzler, D. A. Konkin, L. I. Jurnasova, L. V. Lazarev, I. V. Borodova, and V. V. Borisenco (USSR). Organotin Polymers 160 | |
| Kozin, B. N., I. N. Kukharova, and F. S. Florintskiy (USSR). The Effect of Chemical Structure on the Polymerization Activity of the Unsaturated Organosoluble Compounds 167 | |
| Voi-khantsev, M. V. (USSR). Comparative Processes in the Polymerization of Biopolymers 202 | |

202

49
75/NISOS

SOSIN, S.L.

PLATE 1 WORK EXPERTISE

SOV/1059

Obzory naftochemistry i neftoprotsessirovaniya (Fundamentals of Synthetic Technology in Petroleum Chemistry) Moscow, Gostoptekhnizdat, 1960. 652 p., 1,800 copies printed.

Auth.: Platonov, Artyom Vllich, Professor, and Iur' Al'bertovich Pechonovskiy, President, Executive Ed.; Ed. L'vov; Tech. Ed.: I.A. Rubin.

Purpose: This book is intended for engineers and chemists of petroleum refineries and chemical plants, for councils of the national economy, planning organizations, and scientific research institutes engaged in the production of synthetic products, and utilization of petroleum stock. For the production of synthetic chemicals, the book describes important commercial methods of producing hydrocarbons, petroleum and coal stock, and coal stock for the manufacture of alcohols, aldehydes, ketones, detergents, synthetic fibers, and synthetic rubber. Fine sheet metal, basic equipment of the petrochemical industry is described, and the basic properties of the intermediate and end synthetic products are determined. The state of the petrochemical industry outside the USSR and prospects for its development are covered. No personalities are mentioned.

Card #12

31457
S/629/60/000/003/003/011
D202/D305

5.3830

AUTHORS: Korshak, V. V., Sosin, S. L., and Chistyakova, V. M.

TITLE: The polyrecombination reaction as a method for producing polymers

SOURCE: Vsesoyuznoye khimicheskoye obshchestvo imeni D. I. Mendeleyeva. Uspekhi khimii i tekhnologii polimerov, sb. 3, Moscow, Goskhimizdat, 1960, 39-46.

TEXT: A summary and discussion of results obtained by the authors in their previous investigations, published in 1957 and 1958 (Izv. AN and DAN SSSR). It was found that for producing linear polymers from saturated compounds, it is necessary to use peroxides or other free-radical forming substances in the molar ratio at least 1 : 1 to the saturated compound. The formation of a p-di-iso-propyl benzene polymer with tert.-butyl peroxide is discussed in detail. Three different products were obtained: a) A low molecular weight condensation product consisting of dimers and trimers; b) a high molecular weight product (up to 10,000) linear, soluble in

Card 1/3

31457
S/629/60/000/003/003/011
D202/D305

The polyrecombination reaction ...

benzene; c) a product insoluble in benzene which is believed to be three-dimensional. Formation of the linear polymer began when the ratio of the peroxide to the hydrocarbon was raised to 1 : 1 and complete polymerization took place with ratios of 1 : 2 or 1 : 3. In the authors' opinion, this proves that the second peroxide molecule begins to react not with the starting hydrocarbon, but with its lower condensation products. The chain growth proceeds with the formation and recombination of free radicals formed from the hydrocarbon. This has been termed a polyrecombination process. A mathematical relationship is given between the polymerization index n and N_R , the number of tertiary butoxyl radicals taking part in the reaction: $N_R = 2 - \frac{2}{n}$. The results were in fairly good agreement with this formula. As a method of synthesis of high molecular weight compounds, the polyrecombination reactions differ from polymerization by the absence of any chain-destruction reversible processes. Formation of insoluble polymerization products is due to the splitting-off of hydrogen from the methyl groups in macromolecular radicals derived from the peroxide, thus linking the linear

X

Card 2/3

The polyrecombination reaction ...

31157
S/629/60/000/003/011
D202/D305

molecules into three-dimensional networks. The authors refer to their experiments with different solvents which were carried out in order to avoid the formation of insoluble products, but in that case only compounds of low molecular weight have been obtained. Experiments with the same peroxide yielded linear polymers from the following hydrocarbons: p-dichlorobenzene, p-xylylendichloride, 4,4'-di-iso-propyl diphenyl, acetic and trifluoroacetic acid benzyl esters. / Abstractor's note: It is not clear if in this article the authors describe new work, or simply summarize their previous publications. / There are 3 figures and 14 references: 4 Soviet-bloc and 10 non-Soviet-bloc. The 4 most recent references to the English-language references read as follows: H. McBay, O. Tucker and A. Milligan, J. Org. Chem., 19, 869, (1954); ibid., 19, 1003, (1954); L. Beckwith and W. Waters, J. Chem. Soc., 1008, (1956); I. H. Brook, Trans. Faraday Soc., 53, 327, (1957). X

Card 3/3

S/595/60/000/000/002/014
E075/E435

AUTHORS: Korshak, V.V., Sosin, S.L., Krichevskiy, B.K.
TITLE: Formation of terephthalic acid by catalytic oxidation
of p-dialkyl substituted benzene hydrocarbons with
molecular oxygen
SOURCE: Vsesoyuznoye soveshchaniye po khimicheskoy
pererabotke neftyanykh uglevodorodov v poluprodukty
dlya sinteza volokon i plasticheskikh mass. Baku, 1957.
Baku, Izd-vo AN Azerb. SSR, 1960. 119-130
TEXT: The work described began several years ago with the aim of
finding means of producing terephthalic acid by oxidation with
oxygen from the air. A review of the previous work leads to
the conclusion that the oxidation of p-dialkylbenzenes in the
gaseous phase is not feasible due to relatively poor thermal
stability of terephthalic acid. A new improved method of
producing terephthalic acid is described, whereby p-xylene and
methylnaphthalene are oxidized simultaneously in the liquid state.
In this process each of the components oxidizes more readily than
the compounds taken separately, with 90% yield. The improvement
is explained by the presence in the mixture of p-xylene which
Card 1/5

S/595/60/000/000/002/01⁴
E075/E435

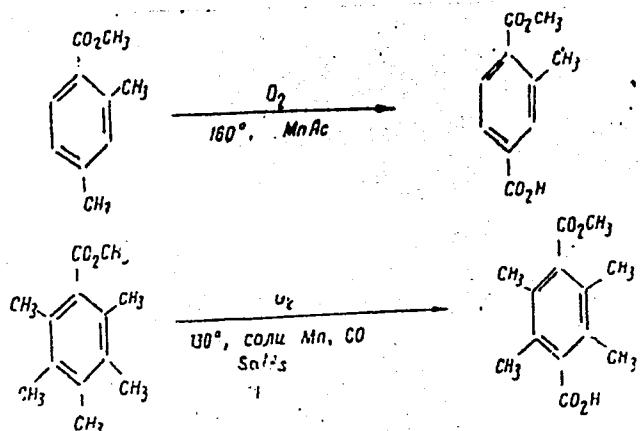
Formation of terephthalic acid ...

esterification of the acids with methanol were employed:
1) esterification catalyzed by H₂SO₄; reagent ratios methanol:
organic acids:H₂SO₄ equal to 10:1:0.5; the reaction was
carried out at 64 to 65°C at atmospheric pressure for 20 to 24 h;
the yield was 75 to 80%; 2) thermal esterification methods;
no catalyst is used and the reaction is carried out in a
continuous reactor at 225 to 230°C under 50 to 100 atm; yield 85%.
This method gives methyl p-toluate contaminated with resinous
products. Esterification with cation exchangers as catalysts
(types KY-1 (KU-1), KY-2 (KU-2) and others) is of great practical
interest. At 120°C (5 atm) and a ratio of methanol and acids 9:1
to 2.5:1 and catalyst and acids ratio 2:1, 95% of the acids are
esterified in one hour. The reaction can be carried out
continuously with the catalyst not losing its activity for more
than 500 h. The catalyst can be easily regenerated by washing
with HCl or H₂SO₄. The purification of dimethylterephthalate was
carried out by vacuum distillation followed by recrystallization
from methanol. The formation of aromatic dicarboxylic acids by
oxidation of methyl esters is of general applicability as shown
below

Card 3/5

S/595/60/000/000/002/014
E075/E435

Formation of terephthalic acid ...



The work was carried out at the Laboratoriya vysokomolekulyarnykh soyedineniy INEOS AN SSSR (Laboratory for high-molecular compounds INEOS AS USSR) and later at the MKhTI im. Mendeleyeva.

Card 4/5

S/595/60/000/000/002/014

Formation of terephthalic acid ... E075/E435

K.V.Borisova, Yu.A.Stepikheyeva, N.I.Bekasov, M.V.Chistyakov,
R.G.Avarbe, M.Kh.Karlina, A.P.Tumayeva, M.S.Khomutin,
S.S.Mgidova and V.M.Berenblit participated in the work.
S.R.Rafikov, B.V.Suvorov, I.F.Bayev, P.G.Sergeyev, A.M.Sladkov,
Kruzhakov and P.Shorygin are mentioned in the article in
connection with their contribution in this field. There are
1 figure, 3 tables and 16 references: 6 Soviet-bloc and
10 non-Soviet-bloc. The four most recent references to English
language publications read as follows:
Ref.7: Chem. Engineers, v.61, no.4, 1954, 106;
Ref.10: Industr. Engng. Chem., v.23, 1954, 1886;
Ref.13: Pines H., Kvetinskas B., Ipatieff V., J. Am. Chem. Soc.,
v.77, 1955, 343;
Ref.14: Pines, Shaw. J. Org. Chem., v.20, 1955, 374.

Card 5/5

5. 3610

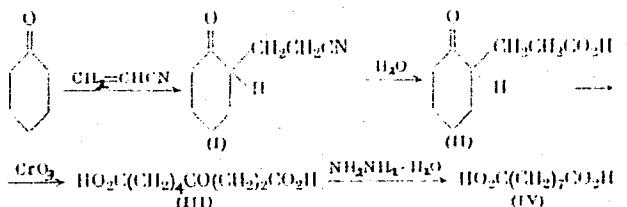
196-361

AUTHORS: Koeshok, V. V., Sodin, N. I., Kuz'mova, Ye. M.

TITLE: Preparation of Azelalic, γ -Ketozelanic and Other
Acids From Cyclohexanone and Nitrile of Acrylic Acid

PERIODICAL: Zhurnal obshchey khimii, 1960, vol. 30, No. 3,
pp. 907-912 (USSR)

ABSTRACT: Azelaic and γ -ketoazelaic acids can be synthesized from cyclohexanone and acrylonitrile in four stages.



Card 1 / 5

Preparation of Azelate, γ -Ketoazelate
and Other Acids From Cyclohexanone and
Nitrile Acid

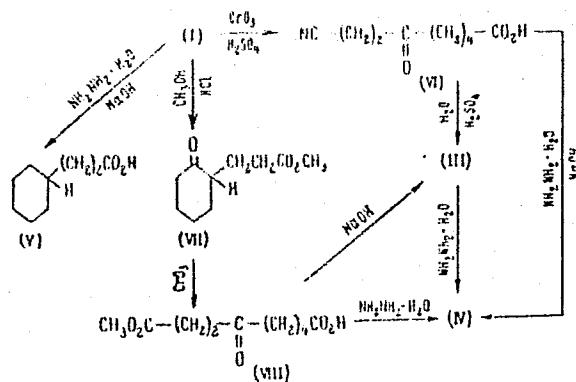
78-340
50779-50-3-3477

The yields of azelate acid, (IV), mp 106-107°, and
of γ -ketoazelate acid (III), mp 108.5-109.5° are 40
and 45%, respectively, based on cyclohexanone, or
50-45%, based on acrylonitrile. Oxidation of
 β -cyclohexanonepropionic acid with chromic anhydride
yields γ -ketoazelate acid (yield up to 75%),
which can be readily reduced to azelic acid. Scheme B
shows all reactions to which adduct I was subjected
in the course of this investigation.

Card 2 /5

Preparation of Azelate, γ -Ketoazelaic
and Other Acids From Cyclohexanone and
Nitrile Acid

76230
SOV/79-30-3-34/69



γ -Ketoazelaic acid can be also prepared by catalytic oxidation of β -cyclohexanonepropionic acid with air in glacial acetic acid. Oxidation of 2-(β -cyanoethyl)-cyclohexanone with chromic anhydride under mild

Card 3/5

Preparation of Azelaic, γ -Ketoazelaic
and Other Acids From Cyclohexanone and
Nitrile Acid

78280
SOV/79-39-3-34/69

Soc., 64, 2850 (1942); Baumgarten, H., Eifert, R.,
J. Am. Chem. Soc., 75, 3015 (1953); American Patent
2625558 (1953).

SUBMITTED: March 10, 1959

Card 5/5

The Production of New Types of Linear Polymers by Means of the Reaction of Polyrecombination

83485
S/020/60/132/02/32/067
B011/B002

to decompose into free radicals in the presence of diphenylpicrylhydrazine. It is also largely stable towards HNO_3 and chromium mixtures. It is very probable that the stability of the polymer is due to the fact that the first product of the polyrecombination reaction, namely the dimer tetraphenylethane,¹ is a completely stable compound (Ref. 5). The structure of polydiphenyl methylene (I) was also confirmed by IR-spectra. On the basis of their results, the authors concluded the following: tertiary butylperoxide decomposes in such a way that 1 mole of peroxide develops only 1 mole of active radicals instead of 2. Hence the maximum of the molecular weight: 2 moles of peroxide consumption per 1 mole of hydrocarbon. Half of the liberated radicals which developed originally, are used for side reactions. From the above-mentioned compounds and others given in table 1 the authors in the same way produced linear polymers with a high molecular weight, soluble in benzene. If durene, ditolylmethane, p,p'-di-isopropyl diphenyl, benzylacetate or other compounds are introduced into the reaction instead of diphenylmethane, large amounts of indissoluble polymers develop besides linear polymers. Their structure apparently is cross-linked by methyl groups. Polyrecombination allows the production of linear polymers with aromatic cycles not only in their side-, but also in their main chains. Finally the authors state that polyrecombination will only produce linear polymers of a

Card 2/3

KORSHAK, V.V.; SLADKOV, A.M.; KRONGAUZ, Ye.S.; KOGOZHIN, S.V.;
RODIONOVA, Ye.P.; CHELNIKOVA, G.N.; MAKAROVA, T.A.; SOSIN, S.L.;
IOSKUTOVA, I.P., red.izd.vz; POLYAKOVA, T.V., tekhn.red.

[Chemistry and technology of synthetic macromolecular compounds.
Carbocyclic compounds] T. 1. Khimi i tekhnika sinteticheskikh
vysokomolekulyarnykh soedinenii. Karbotseptiva soedinenii.
Moskva, Izd-vo Akad. Nauk SSSR, 1961. C. 1. (Slogi nauki:
Khimicheskie namki, no. 6) (MIRA 14:11)

1. Chlen-korrespondent AN SSSR (for Korshak).
(Macromolecular compounds)
(Cyclic compounds)

15.8150 1372 2209 2409 1526

27570
S/190/61/003/009/005/016
B110/B101

AUTHORS: Korshak, V. V., Sosin, S. L., Alekseyeva, V. P.

TITLE: Synthesis of new types of linear polymers

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 9, 1961,
1332-1340

TEXT: The first two authors showed in previous papers (Ref. 1: Dokl. AN SSSR., 121, 299, 1958; Ref. 2: Vysokomolek. soyed., 1, 938, 1959) that when treating peroxides (PO) of compounds such as p-diisopropyl benzene (DIPB), diisopropyl ferrocene, p-dichloro benzene, etc., linear polymers are formed, and, particularly in the case of DIPB, non-fusible and insoluble polymers with cross-linked trimer structure. Polyrecombination of diphenyl methane (DPM), phenyl acetic acid methyl ester, benzyl benzoate, etc., was studied in the present work. When treating these compounds with tert-butyl peroxide (TBPO) (molar ratio of TBPO to initial compound $\gg 1-2$) at 200°C , linear polymers were obtained. Diphenyl methane (DPM) gave a linear polymer, an amorphous, yellowish powder which dissolved in benzene (melting point = $200-220^{\circ}\text{C}$) with a molecular weight

Card 1/7